

**ABSTRACT**

[0050] A regulator circuit with at least two independently selectable and adjustable adjustment circuits. Each adjustment circuit may be connected across a standard voltage divider circuit used to create a reference voltage for operating a voltage pump. Between each adjustment circuit and the voltage divider circuit is an associated connection circuit that is controlled by an associated control signal. When activated by its respective control signal, the connection circuit connects its associated adjustment circuit to the voltage divider circuit so that the reference voltage is generated by the voltage divider as adjusted by the connected adjustment circuit. The amount of adjustment each adjustment circuit can introduce is independently selectable, the regulator circuit can adjust the operation of the pump for different modes of operation and can compensate for process variations without the need to re-design, re-mask or re-fabricate the circuitry.